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MORPHOLOGY OF THE CHINOOK VERB¹

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INTRODUCTION

Dialects of the Chinook language were spoken along both banks of Columbia river from the Cascades to the sea, and for some distance up the Willamette. They are divided into two sets, Upper and Lower, the former embracing those "from the Cascades to Grey's Bay on the northern bank of the river and to a point a little above Astoria on the southern"; the latter "the Clatsop dialect of the lower Columbia and the Chinook of Shoalwater Bay." These last are now practically extinct.

Horatio Hale, philologist of the Wilkes expedition, 1838-42, made a slight study of this language, the results of which are contained in the section on "Ethnography and Philology," of the reports of that expedition, pages 562-564, as "6. *The Tshinuk Family*." It was based mainly on the Watlala dialect of Upper Chinook. In Vol. II of the *Transactions* of the American Ethnological Society, (pages xxiii-clxxxviii) this account was reprinted

¹ Thesis for the degree of Doctor of Philosophy accepted by the Committee of the Division of American Archeology and Ethnology of Harvard University.

under the title: "*Hale's Indians of North-west America and vocabularies of North America; with an introduction.* By Albert Gallatin." Prof. Friedrich Müller copied it again into his *Grundriss der Sprachwissenschaft*, 1882, Vol. II, part I, pages 254-256, adding a few suggestions which were generally correct.

In the summers of 1890 and 1891 Prof. Franz Boas, having learned that the dialects of Lower Chinook were almost extinct, succeeded in collecting a series of *Chinook Texts*, which were published by the Bureau of Ethnology in 1894. From studies of the language in these and the following years Professor Boas outlined its grammar in "Notes on the Chinook Language," published in the *American Anthropologist* for January, 1893 (pp. 55-63). These "outlines," the printed texts, and the manuscript notes made by Professor Boas are the bases of the present study into the morphology of the verb.

Explanations

Figures appended to the examples given refer to the corresponding page and line in the published *Chinook Texts*; thus, 213.19 means that the preceding example will be found in line 19, page 213. *K.* refers to the Katlamat notes. *ex.* after the page number (e. g., 213 *ex.*) indicates that the illustration was taken from notes on that page of Professor Boas' original note-books.

Sounds in the words to which attention is desired are italicized.

I. PHONETIC LAWS

Phonetic changes play such an important part in Chinook that they will be the first subjects for consideration. The appended alphabet is taken from the Introduction to Professor Boas' *Chinook Texts*:

a, e, i, o, u, have their continental sounds (short).

ā, ē, ī, ō, ū, long vowels.

A, E, I, O, U, obscure vowels.

a, e, i, o, u,	vowels not articulated but indicated by the position of the mouth.
ä	as in German <i>Bär</i> .
â	<i>aw</i> in <i>law</i> .
ô	<i>o</i> in German <i>voll</i> .
ê	<i>e</i> in <i>bell</i> .
-	separates vowels which do not form diphthongs.
ai	<i>i</i> in <i>island</i> .
au	<i>ow</i> in <i>how</i> .
l	as in English.
ll	very long, slightly palatized by allowing a greater portion of the back of the tongue to touch the palate.
ɽ	posterior palatal <i>l</i> ; the tip of the tongue touches the alveoli of the lower jaw, the back of the tongue is pressed against the hard palate, sonans.
ɽ	the same, short and exploded (surd; Lepsius' <i>ɽ</i>).
ɽj	the same, with very great stress of explosion.
q	velar <i>k</i> .
k	English <i>k</i> .
k'	palatized <i>k</i> (Lepsius' <i>k'</i>) almost <i>ky</i> .
kX	might be better defined as a posterior palatal <i>k</i> , between <i>k</i> and <i>k'</i> .
x	as <i>ch</i> in German <i>Bach</i> .
X	<i>x</i> pronounced at posterior border of hard palate.
x'	palatal <i>x</i> as in German <i>ich</i> .
s, c,	are evidently the same sound and might be written <i>s'</i> or <i>c'</i> , both being palatized; <i>c</i> (English <i>sh</i>) is pronounced with open teeth, the tongue almost touching the palate immediately behind the alveoli; <i>s</i> is modified in the same manner.
d, t } b, p } g, k }	as in English, but surd and sonant are difficult to distinguish.
h	as in English.
y	as in <i>year</i> .
w	as in English.
m	is pronounced with semi-clausure of the nose and with very slight compression of the lips; it partakes, therefore, of the character of <i>b</i> and <i>w</i> .
n	is pronounced with semi-clausure of the nose; it partakes, therefore, of the character of <i>d</i> .

- i* designates increased stress of articulation.
! designates increased stress of articulation due to the elision of *q*.
ε is a very deep laryngeal intonation, due to the elision of *q*.
2, 4 designate excessive length of vowels, representing approximately the double and fourfold mora.

In this table it will be observed that several pairs of sounds — *d* and *t*, *b* and *p*, *g* and *k* — are noted as “difficult to distinguish.” This is probably not due to lack of fixity in the sound itself, but is because one Chinook sound is mediate between the pair used by us. In the present paper one or the other of the above pairs of sounds will be used indiscriminately. *b*, however, has been entirely replaced by *p* or *m*. The two remaining unaspirated k-sounds — *k* and *q* — will often be found grammatical equivalents of *k* and *g*, and a similar interrelation prevails between the three aspirates, *x*, *X*, and *x*. The vowels *e* and *i*, *o* and *u* constitute two grammatically interchangeable pairs; *a*, the only vowel outside of these of grammatical significance, will be found more closely related to the *o-u* than to the *e-i* pair.

To summarize, in tabular form, grammatical equivalents are —

<i>o, u</i> (to which <i>a</i> is closely related),	
<i>e, i</i> ,	
<i>d, t</i> ,	
<i>s, c</i> ,	
<i>k, g, k</i> (rarely <i>q</i> and <i>ε</i>)	} These will be referred to as “k-sounds.”
<i>q, ε</i>	
<i>x, X, x</i> , the “aspirates”	

More important is the relation existing between the sounds *l*, *n*, and *e*. NixE'/tcEmaôx, he heard about it (266.21),¹ becomes, for instance, in the third person plural noxož'tcEmaôx, they heard about it (266.4); anix'EnEmô'sx'Em, I fool him (110 ex.), becomes atcuXuimo'sx'Em, he fooled them (178.15), the *l* and *n* changing to *e* (or *i*). Again, agigE'/lxēm, she called him (157.10), changes

¹ See explanations, p. 200.

to *nuguēxē'ma*, I will call them (153 ex.), and *axEno'tēn*, she helped sing (150.10), to *nuxoēxō'tēn*, they helped sing (260.21). A direct change from *l* to *n* is probably indicated in the words *ō'poł*, night (108.10), and *nopónEm*, it got dark (23.5). We know, however, that the frequentative suffix *l* becomes *n* under certain conditions. Examples are *aksō'pEnan*, she jumps about (192.13); *nixE'nton*, he ran about (127.13); *ōxunē'n*, she was drifting about (223.10); *tcupEnā'nīL*, he jumps much (111 ex. K.); *atcLElē-ē'mEnīL*, he gives him food always (22.12). In such words as *aksō'pEnan* and *oxunē'n*, it is evident that the use of *n* is governed by the preceding *n*, but no definite rule can be found for the others. The change from *l* or *n* to *e*, however, is always accompanied by the insertion of an *o* (or *u*) immediately before it.

A slight change which ought to be noted in this connection is the omission of a succeeding *o* or *a* prefix when the above change occurs. We have *atcayā'lax*, he did her to him (118.10), but *atctā'wix*, he did them to them (95.2); *aqē'LElotx*, they gave him to it (267.26), and *aqtā'wix*, they gave them to them (249.13) where *w* stands for *u*, and the succeeding *o* and *a* are dropped.

An important harmonic law now confronts us which must, indeed, be considered the most important in the language. It has already been indicated in the examples given above,—*nixE'ltcEmaôx* and *noxoē'tcEmaôx*, *agigE'lxēm* and *nuguēxē'ma*,—where the insertion of *o* (or *u*) after *x* and *g* follows upon the insertion of an *o* or *u* before those letters. Stated in full, this law dictates that, when the vowel *o* or *u* falls before a *k*-sound, the vowel *a* immediately following is changed to *o*, and unless the *k*-sound is one of a group of stem consonants, any other sound has *o* inserted before it. In *noxoē'tcEmaôx*, for instance, *x* preceded by *o* is immediately followed by a new *o* inserted before *e*. The same is true of *g* in *nūguēxē'ma*. In these cases the action of the law is somewhat obscured by the change of *l* to *e*, but *oguē'pXati* (bark-tree, 125 ex.), *nōxok̑oē'nēyak* (bundles, 66.22), and *ō^aō'kwil* (woman, 60.1), will bring it out clearly. *aLgē'pXate*, alder country

(340 ex.), contains the same element -gēpXa as *oguē'pXati*, the only real difference being in the initial vowel, and we find conformably to our law that a second *o* appears between *g*, the *k*-sound, and *e*. Here the *k*-sound is followed by *e*: in the next example, *noxokjōē'neyak*, from *inixkij'ē'niak*, the second *o* is inserted between two consonants, *x* and *k*, *x* being here the reflexive prefix. This word also illustrates the possibility of two successive insertions, for we have one between *x* and *k*, and a second between *kj* and *ē*. The third example we have given, *ō^sō'kuil*, woman, illustrates this still further, besides giving an example of the application of the law to the vowel *a*. *L^sa'gil* is a neuter form of the same word. *o* being substituted for *L*, *a* is then changed to *o*, and a second *o* is inserted after *g*. Other examples of the displacement of *a* by *o* are, *tqagē'lx'te* (firebrands, 43 ex. K.), singular, *oqoguē'lx'te* (43 ex. K.); *Lk'asks* (child, 5 ex.), *uk'ō'ckc* (girl, 108.2). Further cases of insertion are *nā'xLXa* (she begins to burn, 108.16), *nō'-xōLXa* (they burn, 108.15); *nē'Xkō* (he went home, 114.21), *nō'xōkō* (they went home, 118.25); *ē'ktcxam* (he sang, 235.12), *ō'kōtcxEm* (they sang, 167.4). Successive changes under proper conditions may extend to the end of the word. *Lgā'xa*, her child (neuter; 177.6), becomes, for instance, *ugō'Xo* in the feminine (146.9). This word and *ō^sō'kuil* illustrate the possibility of changes in the *stem* where the *k*-sounds are succeeded by *a* or *e*. With a group of consonants in the stem the case is different. *atcLē'lu^kc* (he spears him, 183.5), *atcō'ktcktamit* (he roasts her, 94.4), *atci'Lu^kct* (he sees it, 184.18), preserve their stems -*k*c, -*ktck*, -*kct*, intact, although *k* is immediately preceded by *u*. The converse of the law is illustrated sufficiently by examples already given, *ō'kōtcxEm*, *nō'-xōLxa*, *uk'ō'ckc*, *ōqoguē'lx'te*, where the changes stop at *t*, *L*, *c*, and *e*. Its great importance, and the necessity of always bearing it in mind, are shown by the difference between *L^sa'gil* and *ō^sō'kuil*, *tqagē'lx'te* and *ōqoguē'lx'te*, *Lga'xa* and *ugō'xō*. In operation it is practically infallible, and the predilection of the Chinook for sounds of the *k*-group makes it an ever present factor.

Directly connected with this phenomenon, although not under the same law, are certain usages and tendencies also involving *o* and the *k*-sounds. The regular objective prefix for the third person plural of a transitive verb and the corresponding subjective prefix of an intransitive verb, ordinarily *t*, become *o* when followed by a *k*-sound. Examples illustrating the normal use of *t* are, *agE'tukc*, she saw them (75.22), *atci'tax*, he did them (9.5), *nta'ōwil*, I catch them; *ā'tgELx*, they went down to the beach (133.18), *atgE'tctolax*, they went down river (266.10); but compare with these *aqugō'-om*, they reached them (89.7); *atcō'xōx*, he did them (46.18); *acgō'Xuina*, they (two) placed them in the ground (30.12); *nugō'goimx*, they said (266.5); *nogoLā'yax*, they move (245.9); *nuxoēxō'tenema*, they helped sing (260.21).

Again, the third person plural pronominal prefix of the intransitive verb before *k*, *g*, *k'*, or *q* infixes a syllable *gvo*. *Nē'k'im*, he said (107.1), becomes *nugō'k'oim*, they said (270.7); *nigē'qxamt*, he looked (191.17), *nuguguē'qxamt*, they looked (62.1); *amckLē'watck*, you (pl.) paddle (227.12), *nugukLē'watck*, they paddled (128.25); *lxgē'staqjoama*, we will make war (145 ex.), *nuguguē'staqjoamx*, they go to war (270.1).

When there are two objective prefixes, the second in this person and number is always *o*. This is partly a necessary consequence of the above rules, because a second object never occurs unless followed by a modifying prefix which can only be *k*-, *x*-, *gEL*-, *L*-, or *n*-. If *t* falls before *k*-, *x*-, or *gEL*-, it would therefore change to *o* in obedience to the rule governing in first objects. Before *L* or *n*-, *t* also changes to *o*, and the *L* or *n*- gives place to *e* or *i*; *atcaLE'lqamx*, he shouted at him (*lit.*, he sent her forth to it) 164.26, *atcauwi'qamx*, he shouted (*lit.*, he sent her forth to them) 164.1. The *w* is of no significance. *Atcayā'lax*, he did her to him (118.10), *atctā'wix*, he did them to them (95.2); *aqē'LElotx*, they gave him to it (267.26); *aqtā'witx*, they gave them to them (249.13) illustrate the same, *w* simply standing for *u*. This phenomenon will recall cases already treated when

we first spoke of the change of *l* or *n* to *e*: agigE'/lxēm, she called him (157.10), nugūxē'ma, I will call them. But there the change to *e* seemed due to the preceding *o*, while in the cases now under consideration the change to *o* seems to be brought about by that of *l* to *e*. It may therefore be stated as a rule that, among the prefixes, *tl* must be changed to *oe*.

Besides transformations governed by laws, there are certain marked tendencies to the insertion of *o* after a final k-sound: aLxuwu'tcatk, he hears (235.6), amxauwu'tcatk*o*, you hear (229.4); atciō'latck, he lifted him (74.23), amiōlā'tcgō, you lift him (225.11); yukī'ō'niak, he is hanging (302 ex.), aniukī'ō'niakō, I hang him (302 ex.). The suffix *-tck* may always take a terminal *o*. When these k-sounds are followed by some suffix, an *o* is still more likely to be inserted: tgE'tciqLk, they are crosswise (278 ex.), aLXtcē'qLgux, it is usually across (238.6). Between a k-sound and *m*, however, *a* is used instead of *o*. A favorite combination is the use of a k-sound followed by *o* and immediately preceded by *a*. The future suffix *o*, in Lgiā'xō (it will make him, 38.16), becomes, for instance, *a*, —tkcauwē'xa (they will make them (2) to them, 35 ex.) — when for any reason the preceding *a* is lost. Other examples of a preceding *a* are Lpaqxō-ikc (shags, 89.2), lax nikLā'ko-it (he cannot do it, 204.13), nicilgā'qxō-it (he lay on his back, 147.5). There is also a suffix *-ako*. And as we have found *o* occurring after k-sounds not preceded by *a*, so we also find *a* preceding the same variety of sounds not followed by *o*, in places where we should regularly expect something else. Such are contained in atcā'qc, he bit her (146.9), aqtā'xc, they cut them (96.12), ayāqsti, he had enough (46.17). The significance of these changes will become clear when we approach the subject of verbal prefixes.

Finally we have to deal with a set of changes closely connected with the use of the accent. When the accent preceding a velar or palatal *k* is changed over so as to stand after it, the full sound of the velar or palatal frequently disappears, leaving only a

slight catch, ^ε, or an increased stress in pronouncing the consonant preceding, !, to mark its omission: *Lā'gauwilqt*, his blood (204.16), *L^εā'wulqt*, blood (204.16); *olxā'qxałptckix*, our fire (73.21), *ō^εō'łeptckix*, fire (37.20); *ē'qxeL*, creek (115.10), *t/a'LEma*, creeks (93.1). This rule by no means covers all cases, and especially cases where the omitted velar is in the penultimate syllable. There is a marked disinclination to accent the ultima; *ē'qxałmstk*, single spit (50 voc.) becomes in the possessive not *tga^εā'mstk* (my single spit, 332 ex.), or *tga'qxałmstk*, but *tga^εamstk*. And so with *ō'kxōt*, root (199 ex.), *tga^εat*, my root; *ō'qxoL*, fish weir (217 ex.), *uya^εaL*, his fish weir (217 ex.). A rule covering most of these exceptions is the following: When more than one sound appears before the velar, and the velar is in the penultimate syllable, the velar may be omitted without a change of accent. All that can be stated with unqualified certainty is that where *q* is variable, in those forms in which it is retained, the accent precedes.

e, *i*, and *E* on receiving the accent are frequently strengthened to *a*; *i* and *E* sometimes to *ē*: *ī'ckjalē*, basket (321 ex.), *Ltckj'ala^εyukc*, baskets (321 ex.); *icā'yim*, grizzly bear (61.3), *icayā'mukc*, grizzly bears (145.16); *aLē'gēla-itx*, it was in a canoe (226.25), *atagā'la-it*, they were in a canoe (133.5); *itcā'łEXamītk*, her bed (76.8), *ilemē'tk*, a bed (177.17); *ataxE'lgīLx*, she burns (193.14), *LElxEt'lgē'Lxae*, we make fire with it (11.25); *aniō'lēl*, I bend it (114 ex.), *ixElē'l*, he becomes a little bent (114 ex.). *a* is frequently inserted to carry the accent, especially in verbs where the accent is thrown forward of the verbal prefix *o*. Instead of *atcī'ax* (he did him) we find *atcā'yax*; for *aLga'mlax* (it did her to you), *aLga-mā'lax*. The following words insert such a vowel into the stem: *mLōpiā'LXa*, you will gather it (43.4), *agiupā'yaLX*, she gathered him (42.25); *atciū'qona-itx*, he put him on him (165.4), *atciuqo-ā'na-it*, he put him on him (165.3); *LuXunē'n*, it floated about (272.23), *aLuXuā'nitck*, it floated (47.19); *tiā'kumat*, its spring salmon (92.12), *iguā'nat*, spring salmon (92.11). The insertion of *E* to carry the accent is also common.

II. THE PARTS OF SPEECH

An adequate comprehension of one part of speech requires some knowledge of the others. I shall therefore introduce the main theme with a brief chapter on the other elements that make up the Chinook language.

Substantives are classed under five genders, indicated by the following prefixes: masculine *i-*, feminine *o-*, neuter *L-*, dual *c-*, plural *t-*. These prefixes are pronominal. Thus we have from the stem *-kanax* (chief), *ikā'nax*, *he* (more strictly *him*) chief, or male chief (29.4); *okō'nax*, *she* (strictly *her*) chief, or chieftainess (146.20); *Lkā'nax*, it chief, chief of undefined gender (29.18); *tkanā'ximct*, them chiefs (194.2): from the stem *-goLē'lEXEmk* (person), *igōLē'lEXEmk*, male person (234.1); *goLē'lEXEmk*, an indefinite person (226.8); *cgoLē'lEXEmk*, them two persons (117.6). The language therefore possesses three numbers as well, singular, dual, and plural. As used at the time when the materials for this language were collected, the provinces of these genders were by no means clearly defined. It is not surprising to find such words as *igō'ma*, arrow; *ē'maL*, bay; *ilē'ē*, earth, which in English would be neuter, assigned to the masculine, or *ō'cgan*, bucket, *oite'waLXte*, bailer, *otsō'oitk*, dip-net, to the feminine. The classification of objects with total disregard for consistency is a familiar enough phenomenon in all languages. But in Chinook the same form may be used both in singular and in plural, singular prefixes appearing in the plural, dual or plural in the singular. Words which convey no idea of duality or plurality to us are in one or the other of these genders, and *vice versa*, or the same noun may have plural forms in two different genders, while *-kē*, the regular plural suffix, occurs after the prefix *L-* almost as frequently as after *t-*. Thus, the plural of *ikanī'm*, canoe (157.15), is *okunī'm* (133.6); of *ōpā'utc*, crab-apple (voc. 32), *Łpā'utc*, crab-apples (voc. 32); of *ētē'latē* (a kind of berry; 67 ex. K.) also *ētē'latē*; of *igō'matk*, arrowpoint (218.22), *igomā'tgEma*

(218.24). *t!ō*Ṭ, house (67.9); *tqstō'totx'*, aspidium root (331 ex.); *tqamilā'leq*, beach (75.3), are plural: *ckā'kōlē*, eel; *c⁸ōlā'l*, ground-hog blanket (177.16); *cEqaala'la*, gun (247 ex.), dual. The forms ending in *-ma*, like *igomā'tgEma*, are, however, readily explained, *-ma* being the distributive suffix. The arrowpoints are not conceived of as one group of so many points, but each point is taken by itself, the *i* referring to one at a time. The suffix for the true plural is, as we have said, *-kc*, which, with few exceptions, is found only with the pronominal prefixes *t-* or *L-*. *-kc* seems to have originally indicated a plurality of human beings. From some plural forms *tEpō'te*, arms (27.7); *tkEmElā'plix'*, armpits (213.9); *t!ā'na*, beavers (99 ex.); *t'E'tsikin*, chipmunks (58 ex.); *tE'cgan*, boards (38.9), both *-kc* and *ma* are absent.

In spite of all exceptions indicated, the use of *i* and *o* as distinguishing masculine and feminine objects is fairly amenable to rule, and much the same may be said of *c-* and *t-*, especially in words like *ckulkulō'L*, double-pointed harpoon (109.2); *cE'qxo* double-pointed arrow (192.21); *tE'pco*, grass (191.17); *tkte'ma*, dentalia (248.22); but the use of *L-*, which we have called the neuter prefix, is more obscure. It seems primarily and perhaps originally to have had an indefinite function, *Lkij'äckc*, child, being a sort of noncommittal form of *ikj'äckc*, boy, or *ōkij'ō'ckc*, girl. In the plural it occurs more frequently with the suffix *-ma* than with *-kc* which associates it with the distributive. Not infrequently a substantive may take two plurals, one in *t* and one in *L*. To *ō'npitc*, chicken-hawk (192.12), we find the plurals *tEnpE'tckc* (115 ex.) and *LEnpE'tckc* (89.17), both having the regular plural suffix; *ik'i'kala*, husband (16.10), has *tEnE'mckc* (138.6) and *LEnE'mckc* (165 ex.).

Some few substantives have a plural prefix *na-*: *natē'tanue*, Indians (234.12), *nauā'itk*, nets (95.23), and some names of places a locative prefix *na-* (at), *Nakōtjā't*, (271.2), *Nayā'aqctaōwē* (229.20). Words indicating relationship have a special plural suffix *-nana*: *e'qsîX*, father-in-law (24.3), *tE'qsîx'nana*, fathers-in-law

(104 ex. K.); *ō'qxamgē*, female cousin (27 voc.), *LqxaugEnana*, cousins (111 ex. K.). The substantival suffix *-tk* is used to indicate the point of anything: *igō'ma*, arrow for birds (218.17), *igō'matk*, arrowpoint (218.22), and *-tē* to mark that an object is of wood, *Liā'xētēqLk^utē*, his cross-sticks (313 ex.), *omē'etewaLxti*, thy bailer (118.2). The plurals of substantives not infrequently have different stems from the singular: *ik'i'kala*, husband (253.17), *ṭEnE'mckc*, husbands (138.6); *Lk_i'a'ckc*, child (256.13), *tkā'cocinikc*, children (138.9). A long list of animal names have duplicated stems, as *iq_i'ē'sq_iēs*, blue-jay (28.16), *i'pEnpEn*, badger (62.14), *iqoē'lqoēl*, owl (61.13). Names of birds are almost all onomatopoeic.

The idea of possession plays an important part in Chinook, and since the possessive prefixes are likely to appear frequently it will be best to append a complete list:

	M.	F.	N.	D.	P.
my	itci'-	ōgu'-	LgE'-	cge'-	tge'-
thy	imē'-	ōmē'-	LEMē'-	CEMē'-	tmē'-
his	iā'-	ūyā'-	Liā'-	ciā'-	tiā'-
her	itcā'-	ūgō'-	Lgā'-	cgā'-	tgā'-
its	iLā'-	ūLā'-	Lā'-	CLā'-	TLā'-
our two selves' (incl.)	itxā'-	ōtxā'-	Ltxā'-	ctxā'-	txā'-
our two selves' (excl.)	intā'-	ōntā'-	[Lntā'-]	[cntā'-]	tntā'-
your two selves'	imtā'-	ōmtā'-	LEmtā'-	[cmtā'-]	tmtā'-
their two selves'	ictā'-	uctā'-	Lctā'-	[ctā'-]	tctā'-
our (incl.)	ilxā'-	ulxā'-	[LElxā'-]	cilxā'-	tlxā'-
our (excl.)	intcā'-	untcā'-	Lntcā'-	[cintcā'-]	tntcā'-
your	imcā'-	umcā'-	LEmcā'-	[CEmcā'-]	temcā'-
their	itā'-	utā'-	Lgā'-	ctā'-	tgā'-

The bracketed forms are those of which no examples have actually been found, although there is little room for doubt concerning them. The initial sound, it will be observed, is identical, in each case, with the substantival pronominal prefix for the

corresponding gender, and we shall find that, except in the first person singular and third person singular feminine, the sounds following are identical with the objective pronominal prefix in the verb. A *k*-sound immediately following the possessive prefix is aspirated, and, when the accent is thrown farther back, certain slight euphonic changes are introduced such as have been already treated.

Excepting demonstratives and verbs, the remaining parts of speech present few difficult problems. In the following chapter we shall show that adjectives are morphologically identical with the continuative form of the intransitive verb. They agree in gender with the nouns upon which they depend. Numerals above one take the suffix *-ks* when they indicate human beings. Cardinal numerals above the first are otherwise invariable. *ēXt*, one, possesses gender and has a peculiar form, *ē'Xat*, for human beings. The cardinal adverb is formed by the use of a suffix *-i*, but the ordinal adverb also takes a possessive prefix *iLa*-. The numeral three will illustrate these changes well, as follows: cardinal, *Lōn* (76.10); with human beings, *aLō'niks* (196.1); ordinal (with feminine substantive), *aLā'Lon* (211.20); cardinal adverb, *Lō'ni*, three times (23.18); ordinal adverb, *iLā'Lōnē*, the third time (191.10). Ordinals (very naturally) agree with the substantives on which they depend. *iā'newa*, first, seems to be from an entirely different stem from the cardinal, one. Independent personal pronouns are formed by suffixing *-aika* to the objective pronominal prefixes of the first and second persons in all numbers, *-axka* to the third person singular and dual, *-acka* to the third person plural. The interrogative pronoun *ē'kta* is identical with the substantive for "thing," and is treated accordingly. When there is no interrogative pronoun or adverb, interrogation is indicated by the particle *na*. Demonstratives have not been thoroughly investigated, but four complete series are known to exist, marking various degrees of nearness in time or place and of visibility or invisibility. They incorporate the pronominal prefixes and are

introduced either by *q* or *x*. Those introduced by *q* indicate greater remoteness than the others. When standing for human beings a suffix *-c* appears: *qō'ta*, those things (22.11), *qō'tac*, those persons (27.15). Adverbs are usually invariable. *gō* is the sole preposition covering all kinds of ideas of location, such as are expressed by our prepositions *at*, *to*, *in*, *on*, etc. *Ma'nix*, when; *qē* — *pō*, if; *qē'wa*, if, are the only important subordinate conjunctions. The use of *ta'kE*, then, and *a'lta*, now, to introduce sentences is exceedingly common. There are three coördinate conjunctions, *kja*, *ka*, *cka*. The first of these connects substantives, and *cka* seems to have an introductory function. All are translated by our coördinate conjunction *and*. Interjections and exclamatory particles are numerous.

III. TENSE

In common with other American languages Chinook sharply distinguishes between transitive and intransitive verbs. This division becomes of especial importance when we take up the subject of tense, because three of the five tenses — aōrist of the transitive, transitional, continuative, future, and perfect — are bounded by the line between intransitive and transitive.

Morphologically considered the aōrist of the transitive and the transitional are one and the same tense, both being marked by a prefix *a*. Before vowels, or, in other words, before the pronominal prefixes of the third person singular masculine and feminine and the third person plural, this prefix changes to *n* except when the pronoun is followed by *a* or *o*. In this case the masculine form is *aya-* or *ayo-*, the third person plural, *atgE*. Examples of the regular use of *n* are *nē'xax*, he becomes (22.3), *nā'xax*, she becomes (43.15), *nō'xōx*, they become (28.8); of the exception, *ā'yo*, he went (114.21), *nō'ya*, she went (114.20), *ā'tgī*, they went (116.25). The aōrist of the transitive is used so continually that no especial illustrations need be introduced. The transitional is, in fact, merely divided from the aōrist of the transitive

to which it normally belongs for purposes of contrast with the continuative, a wholly intransitive tense. This is morphologically distinguished by the absence of the aöristic sign. In use the transitional represents an action as completed within a limited time, the continuative as extending for an undefined time, either in the present or the past. The latter is similar to our participle in *-ing* with an auxiliary: she is singing, he was walking. The verbs *nē'xax* and *ikē'x* illustrate its use excellently, *nē'xax* meaning he became, *ikē'x*, he was. *alxomā'yol*, we drifted (149 ex.); *nē'lxam*, he came down to the beach (235.14); *ayō'ko*, he flew (157.24), are other examples of the transitional; *lxomā'yol*, we are (or were) drifting (149 ex.); *ē'lxam*, he is coming down to the beach (235.14); *Lōc*, it is there (167.8), of the continuative. The continuative is a purely intransitive tense, because in transitive verbs the object limits the action in such manner as to preclude the possibility of its occurrence.

Adjectives are morphologically identical with this latter form of the verb, *iō'Łqtē*, "long," for instance, being equally well rendered, he is long, and the resemblance becomes striking when we consider the third person plural, *tge'Łqtē*, since the substitution of *gE-* for *o-* in this connection is an especial feature of intransitive verbs. The substantive also presents striking analogies. Recurring to the examples used in the section on the parts of speech it will be seen that *ikā'nax* might be rendered "he is a chief," *Lkā'nax*, "it is a chief," *tkanā'ximct*, "they are chiefs," *cgoLē'LEXEmk*, "they two are persons." Only the feminine prefix *o-*, *okō'nax*, presents difficulties; but when we actually find *mkā'nax*, you chief or you are a chief (218.1), and *ngoLē'LEXEmk*, I am a person (68.2), that objection is largely discounted. In Upper Chinook the feminine *a* persists in nouns.

The future tense is regularly marked by a suffix *-a*, which, antithetically to the prefix *a-*, is always the last sound in the verb. After *q* or *x*, *-a* in conformity with the phonetic tendency noted in section I usually changes to *o*: *aniā'wa⁸*, I killed him (114.7),

tgEmuwā'°o, they will kill you (66.17); a'mtax, you do them (17.2), tcinlā'xo, he will do them for me (70.6). After a final *a* or *ē* *y* is inserted before adding the tense suffix: atcō'pEna, he jumped (72.12), tcopEnā'ya, he will jump (186.23); aLktō'guaxē, they swept them (111.10), mcktuguē'xēya, you will sweep them (130.8). The reason for this is evident. -*aya* also becomes the future termination when preceded by certain consonants, especially *x* and *m*: atcixē'lotcx, he looks at him (25.3), tcinxēlā'tc~~x~~aya, he shall look at me (25.15); antō'kcEm, I dried (salmon) (336 ex.), antukcEmā'ya, I shall dry (salmon) (336 ex.).

The perfect tense is indicated by a suffix -*t*, the aöristic prefix, as in the future, being absent: oxō'Lxat, it had burnt (166.10); ò'Lxat, she has come down to the beach (107.9); sā'npōt, she had closed her eyes (47.18); Lō'yamt, it had arrived (22.17); iō'mEqtit, he had died (238.14); ē'x'LXa-ut, he was angry (96.8); niā'qciit, I have him held in the mouth (183 ex.); qjoā'p tcina'xt, he has got near me (116 ex.). It is thus found indifferently with transitive or intransitive verbs.

IV. PRONOMINAL PREFIXES

Besides a few slight changes in the aöristic sign, already noted, the difference between transitive and intransitive verbs is marked morphologically by their pronominal prefixes. The objective pronominal prefixes of the transitive, agreeably to a well-known law prevailing among American languages, are identical with the intransitive subjective prefixes. These are the following:

	SING.		DUAL	PLURAL
1st Person	n-	{ inclusive exclusive	tx-	lx-
2d Person	m-		nt-	ntc-
			mt-	mc-
3d Person	{ MASC. i- FEM. a- NEUTER L- }		{ c- (or ct-) t- }	

With two exceptions the subjective prefixes are identical with the objective. In the third person singular masculine, however,

the subjective prefix is *tc-* and in the feminine *g* (or *k*). Thus we have *atktō'cgam*, they took them (248.2), *aLkLā'wa^s*, it killed it, but *atciō'cgam*, *agiō'cam*, he took him, she took him (42 ex., 74.2); *atcā'wa^s*, *agā'wa^s*, he killed her, she killed her (186.25, 176.9). The third person dual is always *c-* and never *ct-* as sometimes in the objective. We also have to add an indefinite subjective prefix *q*, they did, someone did; *aqā'wa^s*, they killed her, or she is killed (99.14). The feminine objective prefix disappears before *o* and *a*. After subjective prefixes in the dual, plural, or third person neuter singular, a *g* or *k* is inserted, *atktō'cgam*, *aLkLā'wa^s*; and in the pronominal combinations I- thee, I you 2, I- you (pl.), the rule for subjective prefixes does not hold, *ayamō'cgam*, *ayamtō'cgam*, *ayamcō'cgam* appearing instead of *anamō'cgam*, *anamtō'cgam*, *anamcō'cgam*. We also find *aqm-*, we 2 (exclusive), thee, or we (pl.) (exclusive), thee; *aqmt*, we 2 you 2- or we (pl.), you 2; *aqmc-*, we 2, you (pl.), or we (pl.), you (pl.), instead of *antkm-*, *antckm-*; *antkmt-*, *antckmt*; *antkmc-*, *antckmc-*. The use of pronominal prefixes in the intransitive presents few peculiarities. *a-*, the aōristic prefix, as noted in the chapter preceding, regularly changes to *n-* in the third person singular, masculine and feminine, and in the third person plural. In the third person plural before *o*, *ato-*, which we should naturally look for, is replaced by *atgE'*, *-atgE'tctolax*, they go up river (266.10), *o* being weakened to *E*, seemingly, and a *g* inserted between it and the pronominal prefix.¹ This is analogous to the use of *g* between pronominal prefixes in the transitive.

In addition to its regular subjective and objective prefixes the transitive verb may take a third, a second objective. This is morphologically identical with the corresponding first objective prefix and is always followed by some other prefix having the force of a preposition: *atctā'lot*, he gave them to her (66.21), *aqt'xoL*, they won them from him (30.18), *aqai'gE'kxōl*, they put her on him (48.26), *atcaLEnqā'na-it*, he threw her into it (172.23).

¹ See pages 212, 213.

The use of this object with *l*- nearly corresponds to that of our indirect object, and the fact, which we shall again refer to, that *l*-, unlike the other prepositional prefixes, does not displace the following prefix *o*, may indicate that some distinction is drawn between it and them. It is to be noted that when the subject of a transitive verb is in the first person singular and its second object in the second person singular, the subjective pronominal prefix seems to be omitted: *iamElō'ta*, I will give him to thee (216.17), *tamElō'ta*, I will give them to thee (15 ex.), *camkEmō'-ktia*, I will pay them 2 to thee (24.11).

Connected to the transitive with two objects by the closest possible ties is a form which we shall have to call half-transitive. It is identical morphologically with the intransitive plus a second pronominal prefix, and, as the subject of the intransitive is morphologically identical with the object of the transitive, so the subject and object of the half-transitive are morphologically identical with the two objects of the transitive. Some examples will illustrate: *anLē'ltckō*, I oil him (163 ex.), means literally, I it (i. e., oil) on him put; *aLanxE'ltcgō*, I oil myself, it (oil) to myself is put (143 ex.). The important point with the Chinook being the object of the action and not who performed it, the pronominal subjective prefix is dropped in the second case. A similar explanation may be made for the change from *atcaLE'lqamx*, he shouts at it (*lit.*, he sends her (the cry) forth to it; 164.26), to *nalxE'lqamx*, it shouted (*lit.*, she went forth from it; 48.15). In these cases the omitted subject is identical with the second object, and that identity is indicated by the reflexive prefix *x*:- *aLanxE'ltcgo* is thus the same as *anLanE'ltcgo*, *naLxE'lqamx* as *aLgaLE'lqamx*, where *n*- and *L*- refer respectively to the same person. Although it thus happens that a large proportion of half-transitives are reflexive, the reflexive prefix is by no means essential. Sometimes it would seem that the subject is a matter of too little importance to require mention, and in such cases it might usually be rendered by the indefinite prefix *q*,

someone. The subject of the half-transitive is really the mediate agent, the real agent being unexpressed. This becomes apparent in verbs employing the passive suffix *-x'it*, which are always intransitive or half-transitive. *atcage'lltcim* (47.18) means that he, a man, struck her, a diving bird; but *ayageltcē'mEx'it* (157.1) means that he, a stone (which word is masculine), was struck by some indefinite agent against her. A similar explanation will hold for *ninElgā'x'it*, he is stuck to me (42 ex.), and *nayin'uyā'xit*, he is choked with a feminine object (198 ex.). But the same is true of many verbs without *-x'it*: *āē'laot*, she has been (fastened) to him (261.15), *ninE'ntctXōm*, I get breathless (96 ex.), *ayugō'ōm*, he reached them (166.6), *ayaē'taqL*, he left her (212.23), although in some cases the exact interpretation is a difficult matter.

In combination the pronominal prefixes of the half-transitive present few anomalies. The object, like the second object in the transitive, is inserted after the regular subjective form for the intransitive without any sounds between. Two masculine prefixes, *i-i*, coalesce into *ē* and two feminines into *a*. The masculine singular subject and feminine object combine in the transitional as *aya-*, the aōristic prefix obeying the rule for cases where the pronominal subject is followed by *a* or *o*: *ayaē'taqL*, he left her (187.2). In the third person plural the objective prefix is always *o*, in agreement with the laws laid down in our first section. Thus we have *atoē'taqL*, they left them (98.21), *ayugōtā'ōm*, he met them (164.12), *ayō'kuiya*, he went to get them (95.12). In this peculiarity the object of the half-transitive again agrees with the second object of the transitive. The insertion of a new prefix also obviates the necessity of changing *t-* to *o-* as subject of the third person plural: *atē'xLxō*, he hung them over his shoulders (109.22), *atE'nxLxō*, I hang them over my shoulders (337 ex.).

V. PREFIXES MODIFYING THE PRONOMINAL OBJECTS

Following the pronominal prefixes in both transitive and intransitive, and always present, where no other sound occurs

between those prefixes and the stem, is a rather problematic prefix *o-*: atciō'cgam, he took him (135.9); ayō'ko, he flew (157.24). It would seem to convey a general sense of motion, more especially of motion *from* the subject of the action.

This is partially suggested by the fact that it is always replaced in presence of the prefix *t-*, toward the speaker. "I carried him," for instance, is anā'yuk₁ (107 ex.), but "I brought him," ā'niŋk₁ (105 ex.), *u-* being directly replaced by *t-*. If we suppose that the general idea of motion in the speaker's mind is *away from* himself, then *o-* would become the common prefix of motion, *t-* being employed only in cases where he wishes to specify a movement in the opposite direction. At any rate the wide use of *o-* indicates some very general meaning. We must take it as the starting-point in treating of post-pronominal prefixes. It is the primordial element, as it were, which yields to others by a certain kind of replacement.

Besides its regular occurrence after the direct object of the transitive and the subject of the intransitive, it is usually, though not always, retained after the prepositional prefix *l-*: atcayā'lōt he gave her to him (65.16), atciā'lax, he did him to her (9.14), ama-iŋō'ktcgutc, you push her into him (130.14), and occasionally with others, especially when the verb stem is short. In atcē'lgax, he did him on it (153.17), and na-iŋō'tXu-it, she stood on him (109 ex.), we have two examples after the prefix *g-*. In conformity with the phonetic tendency already noted, *o*—as in the word atcē'lgax just given—often changes to *a* before *g*, *k*, and *x*.

The first replacement to be considered, and one which is closely connected with the subject of pronominal prefixes also, is that by *kī-* (or *k-*). When this takes the place of *o* in a transitive verb having two objects, one of these objects is omitted; when it occurs in a transitive verb with one object, the verb becomes intransitive. It is, in short, a device for the free omission of objects.

In the first case it is usually the first object which passes out. Thus *atcLē'lu*kc, he speared it into him (183.5), becomes *atcē'-lē*kc, he speared him (133.6); *aqilgEmō'kti*X, they pay him to it (261.23), *atcagEmEgi'ktē*, he paid her (161.9). A few verbs lose the second object; *agiā'lot*k, she put him into her (43.22), *agē'lgit*k, she put him into (13.9). Examples of a change from transitive to intransitive are *atcā'yu*L, he won him (48.18), *nē'k'ī*L, he won (29.4); *aLkLō'kct*x, it looked at it (256.8), *aLE'kē*kct, it looked (218.9); *atciā'qxam*t, he looked at him (30.6), *nigē'qxam*t, he looked (191.17); *aksaxu'tō*, she gave birth to two (25.26), *naḵxā'tō*, she gave birth (25.25). This prefix is employed in the formation of participles and even substantives; *gitā'kē*kElal, the seeing ones (198.20), *itci'kē*qam't, my seeing (130.3), *tēipala'wul*, word (98 ex.), from the verb stems *-kEl*(*kEl*), to see; *-qam*t, to see; *-palawul*, to speak a language. A few verbs have *kjē* instead of *ki*: *akLō'xtkin*, she searched for it (12.5), *naḵj'ē'xtkin*, she searched, also *itā'kē*tenax, what has been killed (245.22). Whether there is a different meaning involved is doubtful.

A still more important prefix displacing *o-* is the reflexive prefix *x-*. In treating of half-transitive verbs some incidental remarks were made about this, and, in fact, it is difficult to avoid encountering it at every turn. It occurs in five different situations, which may be placed in two groups: first, cases where the reflexive is placed after the subject of the intransitive, the object of the transitive, and the subject of the half-transitive; second, where it is placed after the second object of the transitive and the object of the half-transitive.

The intransitive illustrates the reflexive in its simplest use: *agiō'lel*, she shakes him often (72.24), *nē'xela*, he shook (146.4), i. e., he shook *himself*; *aniaski'Emā'tcō*, I throw him headlong into water (60 ex.), *anxā'ski'amukLpa*, I jump headlong into water (60 ex.), i. e., I throw *myself* headlong into water. Generally the reflexive is used in the plural where we should use the reciprocal expression "each other": *atctō'maqt*, he shot them (32 K. ex.),

nuxō'maqt, they fight, or they shoot *each other* (270.7). Again, the reflexive is used sometimes where a simple intransitive would better suit English ways of thought. *atcupō'nit* (9.4) is translated "he hung her up," *nixpō'nit* (107.14), "he hung," and strictly *nixpō'nit* would mean "he hung himself," although we know from the context of that particular story that *he* was hung there by someone else.

After the object of the transitive *x* shows that the object belongs to the subject: *atciō'latck*, he raised him (25.21), i. e., somebody else or something belonging to somebody else; but *mckLxē'latck*, you (pl.) raise it! (50.19), i. e., you raise your own! *agō'pcut*, she hid somebody or something not necessarily her own, *agaxō'pcam*, she hid her own (feminine object; 206.5); *aLkLcā'ma*, it heard it (186.3); *atcixtcā'ma*, he understood him (116.6), *lit.*, he heard his own. Comparing this use with the intransitive, just given, it will be seen that they readily pass into each other by the addition or subtraction of a subjective prefix. Thus *mckLxē'latck*, you raise your neuter object, becomes *aLxē'latck*, it raises itself; *agaxō'pcam*, she hid her own (fem. obj.), *naxō'pcam*, she (i. e., the feminine object) hid herself; or, on the other hand, *nē'xela*, he shook, becomes *atcē'xela*, he shook his own (masculine object); *anxā'ski'amukLpa*, I jump headlong into water, *amEnxā'ski'amukLpa*, you throw me (supposing I am your relative or slave) into the water; *nuxō'maqt*, they fight, *atcoxō'maqt*, he shot them (members of his own family or his slaves); *nixpō'nit*, he hung, *atcixpō'nit*, he hung his own (masc. obj.) up.

There are not many cases of the use of *x* after the subject of a half-transitive verb, but those that do exist agree in every respect morphologically with its use in the intransitive, except that a pronominal object follows. In *amxanElgu'Litck*, you tell me (97.10), *m* is the pronominal subject and *n* the object with *x* between. Rendered literally this would probably be something like "you deliver yourself of information to me." *aLxaLk'umLuwā'kōtsgōx*, it hides (itself) in woods to watch for it (199.17), is

another example, *L* being the subject and a second *L* the object.

The two remaining uses of this prefix, after the second object of a transitive verb and the object of a half-transitive, are morphologically identical. Transitive examples are *amLā'xcgam*, you take it from her (185.16); *Lqj'ōp aqeā'xax*, they cut her head off, *lit.*, they cut him from her (16.14); *Laq° atcā'ēxax*, he took her away from him (150.11). Here the reflexive refers to possession exercised over the first object by the second. Following the object of a half-transitive its use is the same. *Lāq° atē'xax*, "he took them off," means literally his own plural objects were taken off from him, and since "he" himself performed the action no subject is inserted.

The relation between these two uses—after the second object of a transitive and the object of a half-transitive—is exactly parallel with the relation between those after the object of a transitive and the subject of an intransitive. *amckLxē'latck*, you raised it (your own), becomes, when the subject is identical with the object, *aLxē'latck*, it raised itself; and here *Lā'q° atctē'xax*, he took them from him, becomes *Lā'q° atē'xax* (110.5), he took them off, when the subject and second object become identical. Since we have forms where the reflexive is used after the subject of a half-transitive, we ought to expect transitive verbs with two objects having this prefix between them. So far none have been observed; but as half-transitives of the corresponding type are very rare, this is not altogether surprising.

The reflexive prefix, then, in addition to its purely reflexive use has a possessive function. The possessor is indicated by the subject or the second object of the transitive and the object of the half-transitive; the thing possessed by the object of the transitive, by the subject of the intransitive and half transitive. In the subjects of the intransitive and half-transitive the thing possessed and the possessor coincide.

VI. PREPOSITIONAL, ADVERBIAL, AND MODAL PREFIXES

Three prefixes in Chinook convey a strictly prepositional meaning: *l-*, to or for; *n-*, into; *k-*, on. They always occur in company with a second object in the transitive, an object in the half-transitive, or an object in the transitive with *ki*.

l- has been referred to in a previous section where several examples were given. We have also explained the change of *l* to *i* after *o*. Further examples of the use of this prefix are: in the transitive, *atciā' lax*, he did him to her (9.4), *amtEni/pā'yaLx*, you gathered them for me (213.24), *ackLē' lōk'ixax*, they two brought it to him (29.9), *aqtawē' makux*, they gave them to them (246.10); in the half-transitive, *tEn/lā'xo-ix*, I know them (*lit.*, them to me are known; 45.21), *Lā'loc*, it was in her (*lit.*, it to her was; 71.6), *cxana' lax*, they two come to be on me (193.1), *ā'ē/aot*, she did (hang) to it (224.15); in the transitive with *ki*, *lxLE/lgē'ta-tēkca*, we will throw (food) to it (174.7), *atcē' l'kikc*, he spears him (133.6), *aqē' lgitgax*, they placed him in (107.12).

The uses of *n-* and *k-* will be sufficiently understood from a few more illustrations: in the transitive, *atcaLE'n'uya*, he put her into it (172.6), *atcaLEnqā'na-it*, he threw her into it (173.6), *antcaṇpā'naLx*, I jump into her (60 ex.), *lit.*, I jump them two (legs?) into her, *man kō'tXumita*, you will make her stand on me (24.13), *aqa-igē'kxōl*, they put her on him (48.26), *acgiakqā'na-it*, they two put him on her (116.10), *atcLō'kxux*, he poured it out on them (166.3); in the half-transitive, *sā'npōt*, she closed her eyes (74.18; *lit.*, them two had shut her within); *nēnEnLE'mko-it*, he flew into my eye (74 ex.); *nine'ntctXōm*, I get out of breath (or he leaves from within me; 96 ex.); *Lō'kōc*, it was on them (39.12), *aLgō'tX*, she stood on it (191.20); *aLE'nkatka*, it comes flying above me (37 ex.); in the transitive with *ki*, *atcakgē'tgē*, he covered her (*lit.*, he put on her; 84 ex. K.), *aLōgōtge'kxo-it*, it covered them. No cases of *n-* in the transitive with *ki* have been found. In some instances,—*sā'npōt*, *nine'ntctXōm*, *aLE'nkatka*,—the prefix cannot be literally translated *into* or *on*, but it

is evident that the idea of something within, encompassed by, or above, on top of, *is* conveyed. The eyes are enclosed by the lids, the breath gives out from within, the bird is on in the sense of being above the speaker.

Six prefixes may be classed as adverbial: *gEL-*, which indicates purpose, *gEM-*, which conveys an idea of proximity or companionship, *X-*, "on the ground," *k/-*, "over and over" or "around and around," *t!o-*, "good," *t-*, toward speaker. In distinction from prepositional prefixes this set does not necessarily refer to an object expressed within the verb. A few examples will illustrate their use better than any description, but it must be borne in mind that scarcely one can be uniformly translated into English by the same set of words.

Examples illustrating the use of—

gEL-: iam*kE*lō'tga, I shall keep for you (128 ex.); al*gi*g*E*'l*CXEM*x, it sings for him (260.17); at*cē*'*kE*lōya, he went to seek him (175.24); amsgang*E*lō'tka, you shall keep her for me (154.5); aq*a*-ig*E*'l*Cim*, they struck her on him for (a purpose) (65.16); ni*l*g*E*lā'xō, I shall do him with it for (a purpose) (24.8); na*l*g*E*lō'ya, she went to get it (224.21); na-ig*E*'l*Cax*, she leaves for his sake (250.14); nxag*E*lō'k*La*, I shall be carried to her for (a purpose) (208. ex.).

gEM-: ni*gEM*tō'ma, I shall accompany him (248 ex.); aq*l*g*um*-ō't*Xuit*, they stand near it (238.4); Lam*gEM*ō'ktia, I shall pay it to you (24.8); aq*l*g*EM*ō'kti*X*, they pay him to it (261.26); na-ik*EM*ō't*Xuit*, she stood in him (near by) (129.11); al*Xa*l*gE*'m'apkax, she steamed herself (239.27).

X-, "on the ground": ē'*Xoc*, he is on the ground (39.18); ā'*Xoc*, she is on the ground (191.15); o*X*ō'la-it, they are dead (17.2), *lit.*, they are placed on the ground.

k/-, "over and over" or "around and around": an*EX*k*l*ē'niakō, I roll him up (63 ex.); aniā'*k*l*EM*atcō, I throw him headlong into water (60 ex.); nā'ē*k*l*EM*ap*Xuit*ē, she fell down (headlong) (154.1).

t!o-, "good" or "well" (cf. it!ō'kti, "good"): ē*zt*'ō'cgam, hold him fast (or good) (44.15); it*SE*'t!ōxōtskin, I am a good worker (*lit.*, my good workings; 69.11).

t-, toward speaker: ak*Lē*'t*k*l*am*, she brought it (124.24); at*cē*'t*k*l*am*, he brought him (to the house; 175.12, 13); mē*t*gā'l*EM*am come and bring her (172.15); al*E*'nk*ak*ka, he comes flying above me (37 ex.).

In use,—see the last example given,—adverbial prefixes are placed between prepositional prefixes and the stem.

Reflexive forms of *gEL-* and *gEm-*, especially the former, are very common, and their use may be further illustrated. As might be expected they are practically confined to the intransitive and half-transitive. Examples illustrating the use of—

xEL-: *nxELtō'ma*, I accompany (i. e., I come along for myself; 3.131); *nixELklā'ta-it*, he remained awake (108.10); *naXE'fokō*, she awoke (for herself; 186.10); *naXE'la*, she left (for her own purposes; 250.10); *cxELtā'qta*, they two meet (171 ex.); *acXE'kā'yu*, they two fight (16.13); *naLxa'lax*, it becomes (i. e., she makes it for herself; 267.2); *nicXE'luktcō*, they two let him fall (i. e., he fell from them two; 127.5); *na-ixE'lgilx*, he made fire (176.16), or, "she burns for himself"; *naLxE'lqamx*, it shouted (46.21), or, she shouted for itself; *aLa'xaltciam*, she combed herself (13.2), or, it combed for herself; *nanXE'lgamit*, I strike it into myself (14 ex.).

xEm-: *cxumElā'-itx*, two stood close together (228.25); *ninxEmtcē'na*, I lay it under myself (101 ex.); *aliXā'motk*, it stakes him (a bet; 30.16); *nenx'E'mōa*, I kill the relative (of an evil doer; 203 ex.).

Finally, we have a prefix *t-* identical in position with the prefix *t-* already considered, but conveying a totally different meaning. The verb with this prefix has the force of a potential, and in translation is rendered by one of our auxiliaries, may, can, must, would, etc. [*ts!Ex atcLā'x*,]¹ for instance, means, he broke it, but *ts!Ex tsLE'tx*, he can break it (61.8); [*nēkct tā'lalx aqtō'piaLxax*,] they do not dig gamass; *nēkct tā'lalx qtE'tpiaLxax*, they must not dig gamass (94.15); [*nēkct amtā'qamt*,] you do not see them; *nēkct mtE'tqEmt*, you cannot see them (177.14). So *nākct taLj tlayā' nētX* means I cannot make him well (199.6,5), *nākct Lkci'tpē'Xunil*, she must not blow it up (238.16), *ē'kta amē'tuwa*, what can you do? (61.19). Since the potential is not limited to any special time, the aōristic sign is usually dropped in presence of this prefix. Like the first mentioned *t-* it displaces *o-*. The frequent use of *nākct* in the examples given is due to the great

¹ Forms not actually found in the texts or notes are bracketed.

number of these forms in portions of the *Chinook Texts* dealing with tabus, many of which may be consulted on page 238.

VII. SUFFIXES

The Chinook verb may take suffixes of three orders, which we shall treat under the following heads: (a) locative suffixes, (b) derivational suffixes, (c) generic suffixes.

Locative suffixes, with the exception of *-am*, arriving, may be treated in pairs, as follows: *-pa* and *-p!*, *-wulXt* and *-tcu*, *-Lx* and *-ptck*, *-akô* and *-ê*. They indicate the various directions in which a motion may take place.

-pa and *-p!* are almost exact equivalents for our words *out* and *in*: *ayô'epa*, he went out (64.19), *aLo'p!*, it entered; *atcô'ktpa*, he put them out (42.8); *nē'tp!a*, he came in (67.9); *atciô'tipa*, he dipped him out (125.7); *nē'ckop!*, he went in (167.18). *-p!* is found mainly with some form of the verb to go.

*-wulXt*¹ and *-tcu* are also nearly exact equivalents for our adverbs *up* and *down*, either in the sense of up into the air and down into the earth, or in that of up and down a stream: *ayoē'wilX*, he went up (17.1); *nē'tlcô*, he descended; *ayugô'wulX*, he flew up, (81 ex.); *aLoē'luktcu*, it fell down (177.21); *anô'tctuwulX*, I ascend a river (in a canoe; 134 ex.); *niu'Lā'ēmitatcoa*, I will let it down (46 ex.).

-Lx and *-ptck* have no equivalents in English; *-Lx* is used of a motion from a closed or shut-in place to an open one, from woods to an open prairie, from woods or houses to a beach, from a beach to the open sea, from the sides of a house to the center; *-ptck* expresses motion in the opposite direction—the idea is perhaps best conveyed by our expressions “to the open,” “to cover.” Examples are: *ā'yôLx*, he went down to the beach (38.9); *ā'Lu-ptck*, it went up to the woods (176.19); *tcLô'guiLxrat*, he had carried it down to the beach (95.11); *nô'ptcgEx*, she went up to the trees (92.2); *amialä'maLx*, you threw him into her (118.19);

¹ The *t* is difficult to distinguish.

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ayō'Xuni^{ptck}kax, he drifts ashore (261.5); ā'yūLx, he went to the middle of the house (60.10); ayō'^{ptck}, he went to the sides of the house (60.13). -Lx is used much less frequently than -^{ptck}.

-akō and -ē¹ can usually be translated exactly by the English words *around* and *across*: nēxLā'kō, he went around him (88.24); aLixaniā'kux, he rolls blanket about himself (24.22); nix·Enā'nakō, he turned around (162.10); aLauweā'yaku-it, he enclosed them (50 ex.); na-i'kutctē, she crossed (74.5); anigElgē'xaxē, I shall swim across (217.11); nikatkjā'ya-i, I haul across (37 ex.); nige'lkōkō-i, I wade across from here (37 ex.).

The suffix -am indicates that a thing is accomplished, that one has arrived at a certain point. We frequently find a verb of motion followed immediately by the same verb with the suffix -am. The second then means that that motion is accomplished. In line 5, page 74, we find nai'kōtctē, na-igō'tctam, she crossed, she got across. So atctō'kctam means he arrived to see them (47.17); atci'tkTām, he arrived bringing him (26.6); ayō'Lxam, he arrived at the beach (23.23); acxalgē'taqtame, they arrive to meet it (275.20). In aqLgā'ōm, it is met (117.24), and niXatā'kōm, I return (35 ex.), -am is changed into -om after a k-sound.

After l, n, and the vowels this suffix appears as -mam: Lgā'lEmam, go and take it (25.26); ē'XtkinEmam, go and find him (25.14); aLXatgō'mam, it got home (69.23); aLguguixē'mam, it invited them (98.19); atcuigonā'mam, he reached the smoke-hole to open it (226.4).

The derivational suffixes are at the same time more important, more interesting, and more obscure. Two of them it has been found impossible to define with accuracy, and the others present no such simple problems to the English translator as the locative suffixes just considered. These suffixes are -x, -a-it, -a-itx, -im (or -Em), -l, -L, and -tck, all of which convey some idea of the frequency or duration of an act.

-x is the suffix used to indicate that anything is customary or

¹ These two suffixes are paired for convenience only; both occur in the same word.

usual. It will thus be found throughout large sections of the texts where customs and rites are treated. *aLxEI'ō'kō* means she awakes, but *aLxE'lokux*, it is customary or usual for her to awake (238.2); *nugō'go-im*, they say (128.4), *nugō'go-imx*, it is customary for them to say (266.5); *aqL'Elgē'mēmtoṃx*, it is customary for them to pay it (204.14); *aqexē'nxax*, it is customary for them to place him upright (48.3), etc., etc. The usage is very distinct.

-a-it marks continuity of condition or position. It signifies that the state of an object is one continuing through an indefinite period of time: *ayō'La-it*, he sits there (i. e., continues to sit; 212.16); *yakqā'na-it*, he (rope) continues to lie there (104 ex.); *naktcā'xa-it*, she continues to wail (275.2). The following, *aLō'cko-it*, it is hot (174.13); *mkō's^εu-it*, you are pretty (12.12); *ayō'txu-it*, he stood (193.1), have the same suffix, *a* being simply changed into *o* or *u* after the *k*-sounds.

-a-itx is usually translated in the texts by the word "always," but more strictly it indicates what is habitual: *antcoē'walx'tEm-a-itx*, we habitually climb (a pole, etc.; 48.1); *aLk'īōlā'lep'ia-itx*, they habitually went digging (roots; 74.18); *qsgEmoptcā'lalEma-itx*, they two used to lead you by the hand (117.8); *ayō'tXu-ita-itx*, he always stood (109.2); *ayōLā'-ita-itx*, he stayed habitually (127.2). It might perhaps be suspected that this suffix is nothing more than a combination of the two preceding, but whatever its origin it is now entirely independent, as is clearly shown by our last two examples, *ayōLā'-ita-itx* and *ayō'tXu-ita-itx*, where *a-it* and *a-itx* occur together. Its relationship with *x* is very close, yet what is habitual with one man or a body of men may not be customary among the whole people.

The suffix *-im* (or *-Em*) is a frequentative indicating that an action is performed at several distinct times. It recalls, somewhat, *-ma*, the distributive suffix of the substantive. *ayō'*, he went, becomes with the addition of this suffix *ayō'yim*, he went several times (192.10); [*aLge'qLtuq*,] it kicked him, becomes *aLgeqLtu'qo-im*, it kicked him many times (68.24). So *atcuxo-*

tcē'nan'Emx means "he pressed each with his fist" (98.16); atcLEkuXotE'qo-imx, he strewed on each (98.6); Lxā'xo-ilEmx, it shall become so every time (95.24); aqa-ilgā'maltEmx, they strike her on it several times (202.10).

-l, like the preceding, is a frequentative, but while the former shows that the action is performed several distinct times, and often upon several distinct objects, -l marks the essential occurrence of so many repeated movements as a part of the action itself. The actions expressed are, with the first suffix, few and comparatively limited, in the second, numerous and unlimited. Thus -l is used of the many waves on the ocean, ugō'laL, surf (92.1); the many steps in walking, oxowā'yoL, the walkers (i. e. quadrupeds; 60.4); the many strokes of the wings in a bird's flight, ktgE'kaL, birds (*lit.*, the flying ones; 60.05). Other cases are aniō'leL, I bend him often (114 ex.); agilgē'xo-iL, she boiled much (68.19); nēkLxēL, he crawled about much (70.24); giLā'ki-kELaL, the seers (those always seeing; 197.15).

Sometimes -n is used instead of -l, in obedience to the phonetic tendency already noted. Thus we find oXunē'n, she was drifting about (223.10), instead of oXunē'l; niXE'nkōn, he ran about (127.13); aksō'pEnan, she jumps about (192.13); aqtomē'tckin, they find them by looking about (229.17).

Closely related to -l and continually occurring in conjunction with it is a third frequentative suffix -L. The exact meaning and use of this are still obscure. At different times it may be translated by the adverbs much, often, continually, completely. Examples are atcEmcgElē'moL, he invites you much (127.9); aqLgElgā'xo-iLx, he is asked often to do (his work; 240.24), and with -l or -n, mEnxkō'liL, you pass me often (122 ex.); oxusgā'liL, they play much (17.4); Lgitsgā'liL, she took often (264.9); acgiā'qcimEniL, they two bit him all over (26.3); Lkcitpē'XuniL, it blows him up (238.16); tcupEnā'niL, he jumps much (111 ex. K.); naō'yEniL, she stays (or camps) continually (275.3).

When combined with the suffixes -l (or -n) and -ako, or -l

and *-pa*, some remarkable phonetic changes are introduced. Thus the final *o* of *-ako* and *a* of *-pa* are dropped, *-l* taking their places, and not infrequently the *a* of *-ako* changes to *o*, while *k* itself is apt to deepen into *q*: *atcuguā'laql*, he recognized her (157.9); *nōxoēxēlā'lukʔ*, they mix continually (132 ex.); *qtcEngā'-luql*, the one who always went first (89.5), illustrate the changes with *-l* and *-ako*; *aLxat^εEmā'nEnukʔ*, it is almost extinguished (50.26); *aLkciLkā'nanukLx*, she steps across (264.14); *anuxukʔuē'niyanukʔ*, I make a bundle of many things (125 ex.), those with *-n* and *-ako*; *kLōlā'lepʔ*, she was habitually digging it up (153.7); *Lotē'lipL*, it was dripping often (96 ex.), those with *-l* and *-pa*.

Finally, there is a suffix, *-itck*, of the significance of which we know still less than of that of the above, but, since it continually replaces *-l*, it would seem to convey a similar or an antithetic meaning, and be more naturally included in this group of suffixes than in any other. Examples are: *nau'itck*, she danced (123.21); *ayuXuā'nitck*, he drifted (134.6); *nqʔē'watckō*, I am paddling (134.26); *atsō'tXu-i'tck*, he made her ready (42.17), perhaps also, *atciō'latck*, he lifts him (25.21).

As generic suffixes, are classed a pair which seem to give some distant reflection of our common division of verbs into active and passive. They are *-amit*, "causing," and *-x'it*, "caused." The first of these may be used in the transitive or the intransitive with a reflexive; *-x'it* only with the intransitive or half-transitive. The latter indicates that the subject receives some action from a source not specified in the verb. These two suffixes by no means divide all verbs between them like the active and passive voices in English, and there are few cases where the same stem seems capable of assuming both. The following are examples of *-amit*: *miōkjuē'matctamita*, you will cause him to be ashamed (75 ex.); *aqa-ēlgā'mit*, they caused her to be fastened to him (16.1); *aqixL-ā'mitakō*, they caused themselves to pass around him (69 ex.); *atcungō'mit*, he caused her to be carried away (11.5); *mcxēxLā'-*

mitakō, you cause yourselves to be placed around (51 ex.); of *-x'it*: *nixEl'uā'x'it*, he gets bent (114 ex.); *nuwā'Xit*, she was pursued (223.10); *oXo-inā'Xit*, they are placed (145.6); *anuqunā'itix'it*, I was thrown down (45.5); *nēlgā'Xit*, he was thrown headforemost (99.25); *ayagEltcē'mEx'it*, he was thrown against her (154.1).

A word should be said in conclusion on the order observed by suffixes when combined. Locatives always come before derivationals and give place on their part only to the generic suffix *-amit*. When *-am* occurs with other locatives it is placed after them; *-x'it* is always next to the stem; *-l*, normally, is before all other derivationals, then comes *-L*, *-a-it*, or *-tck*, followed by *-im*. Next *-a-itx* or *-x* may be inserted, and at the end the temporal suffixes *-a* and *-t*. The locative *-̃*, across, is always last and is never found in combination with derivational suffixes except *-x*. These statements have reference only to the general order of suffixes, and it is not to be supposed that a whole series will be found in any one form. *antco-ē'wālx'tEma-itx*, we continually climb (48.1), where we have the locative *-wālx't* (equivalent to *-wulXt*), up, followed in succession by the derivationals *-Em* and *-a-itx*, gives the common order with three suffixes. Also note *niḵLxē'laL-Em-a-itx*, he crawls about much (94.23), and *aLkTōlā'lE-pLa-itx*, they habitually go digging (74.18); *ayō'p'am*, he entered (58 ex.). A final *l*, whether the suffix or a part of the stem, is usually doubled before other suffixes.

VIII. Mood

The indicative may well be considered the normal mood of every Chinook verb, and its use is illustrated by nearly all the examples given. The potential is differentiated from this by the insertion of a prefix *t-*, but as its use has been fully explained in section VII, all that remain to be examined are the imperative and two participles.

In both transitive and intransitive the imperative lacks the

aöristic sign *a-* and the verbal prefix *a-*. The intransitive changes no further: *-amō'*La-it, you stayed (11.13), *mE'*La-it, stay! (15.13); *ayō'*tXu-it, he stood (184.20), *mE'*tXu-it, stand! (15.6);—and the same is true of the transitive verb when the command is addressed to more than one person: [*mckLucgā'*ma,] you (pl.) shall take it; *mckti'*ckam, you (pl.) take them! (271.20); *mckLxē'*latck, raise it! (50.21); *mcixLā'*kō, go around him (138.15). When the command in the transitive is addressed to one person, however, the first pronominal prefix is dropped: [*amE'*ctok^uɿ,] you (sing.) carried them two away, *ci'*k^uɿa, carry them two away (262.2); [*amiō'*cgam,] you took him, *ē'*cgam, take him! (44.10); [*amLgā'*lEmam,] you went and took it, *Lgā'*lEmam, go and take it! (25.26). The presence of a second object—e. g., *iā'*lot, give him to her! (90.6)—makes no difference.¹ Half-transitive imperatives simply drop the aöristic prefix: *LEmcxE'*ltcam, comb yourselves (138.5); *amxE'*lgiLx, make fire (149.11), *L* and *a* being the respective subjects, *mc* and *m* the objects. It not infrequently happens that the future is used where we should employ an imperative; as, for instance, *mEtockā'*mai, take hold of them (*lit.*, you shall take hold of them; 13.1).

The participles are the passive participle, formed by prefixing *i-*, and the active participle, which takes *g-*, *k-*, or *q-*. In the former *i-* is immediately prefixed to the verb stem, and though suffixes, especially *-l*, frequently appear at the same time, they are not essential. From [*agā'*yu]stx, she carried him (43.26), is derived *ē'*ctxul, load (61 ex.); from [*aqiō'*]tcXam, they boiled him (46.7),

¹ This omission is perhaps to be correlated with that noticed in treating the indirect object where we said that, when the subject is in the first person singular and the object in the second, the subjective prefix is omitted: *tamElo'*ta, I will give them to thee (15 ex.); *lamgEmō'*ktia, I pay it to thee (24.8). Probably it seemed natural to the Chinook, when two were conversing and one spoke of doing something to or for another, to *assume* that the speaker himself was the doer without indicating it by the pronominal prefix. Perhaps this may have something to do with the failure of *n* to appear in the pronominal combinations *ayam-*, *ayamt-*, and *ayamc-*. In the imperative under consideration the subject of the command would generally be singular and could simply be *understood*. In duals and plurals the subjective prefixes would then be introduced for definiteness.

itcxā'mal, boiled food (63 ex.); from [atcLō']tēna, he killed it (23.22), *iā'k|ētēnax*, what he killed (94.4). The last, it will be seen, inserts *k|ē*, a common phenomenon in the formation of participles, as instanced in the discussion of *k|ē*, section v, and takes the masculine possessive prefix *ia-*. This participle, in fact, is treated exactly like a masculine noun, and may take all its possessive prefixes. We have *ictā'ctxōl*, her load (75.8), as well as *ē'ctXul*; *itā'tcEXmal*, what they had boiled (or their boilings) (46.22), as well as *itcXā'mal*. We seem to have a few instances of passive participles of other genders: *Lgā'pona*, what they brought to her (249.9); *ctākemē'mtōm*, what they had received in pay for curing (150.12); *oyā'tuwanXa*, the one he was racing against (48.10).

The active participle is formed in two different ways: first by prefixing *k-*, *g-*, or *q-* to a substantive or a verb-stem, preceded by a possessive prefix, or secondly by prefixing one of the same letters to a verb, in place of the sign of the aōrist. Thus the stems *-ckēwal*, *-kēl*, *-kanate*, *-lXam*, to walk, to see, life, people, may be built into the participles *gitā'ckēwal*, travelers (*lit.*, those possessing walking powers; 259.23); *gitā'kikElal*, the seeing ones (those possessing seeing powers; 196.1); *giLā'Xanatē*, those having souls (199.9); *gitā'lEXam*, the people of a town (or those possessed of a town; 248.1). Examples of the second method of forming active participles are: *kLkēx*, being (261.29), from *Lkēx*, it is: *qtgē'kal*, birds (60.5), from *tgē'kal*, they fly; *kLktō'tx*, the one who gives them away (255.3), from *aLktō'tx*, it gives them away; *kLkLā'x*, the one who did it (202.9), from *aLkLā'x*, it did it.

IX. VERB-STEMS

Although the stems of many Chinook verbs are not clearly defined, they seem to have consisted normally of a single vowel sound or a small group of consonants: *-o*, to go; *-a*, to pursue; *-tX*, to stand; *-tk*, to put; *-kct*, to look, etc. In several cases the stem is an onomatopoeic element, which is also employed indepen-

dently: nuguguē'staqjoamX, they go to war (270.1); staqigā'xo, war she will make on him (116.25); atctupē'XoXoē, he blew them away (25.14); Xuē'Xuē agē'lax, blow (*or* breathe), she did it (213.13); ackLjē'mēnē, they two dived (47.12); LjEmē'n atcā'x, into water he sent her (162.20). The use of onomatopoetic elements as invariable verbs accompanied by a modifiable auxiliary is much more common than as stems with pronouns directly prefixed. Indeed, this is one of the marked features of the language, and requires considerable illustration. "To go" is the accompanying auxiliary in one or two places: LjEla'p ayo', he went under water (14.16); but almost universally it is "to do" (atca'x, he did, etc.), or the reflexive form (nē'xax, he became). A selected list of examples follows: Laq aqē'cxax, they took him away from them two (45.9); tsjE'xtsjEx aLgā'yax, it split him up (45.19); tuwā'X nō'xōx, it became light (45.27); tcXup ā'lax, it was extinguished (51.3); tcXEp nē'xax, he began to hesitate (*lit.*, he became hesitant; 28.1); wax ikē'x, blossom they (*lit.*, he) did (165.26); kī'ā'ya nē'xax, he became nothing (29.10); qxul atcē'lax, he hung him on him (27.16); Ljap atciā'x, he found him (139.23); tā'mēnua aLxā'x, he gave up (139.26). The number of illustrations might be multiplied almost indefinitely. Doubled onomatopoetic stems — tsjE'xtsjEx, split in pieces — convey a frequentative meaning. Many substantives are also used in this way: tXut nō'xōx, smoke they got (i. e., it became smoky; 45.22); Lkā'pa aLi'xax, snow it became (*or* it snowed; 45.1); Lqā'kxul aLi'xax, hail it became (*or* it hailed; 25.9); and again they are often used, like onomatopoetic words as verbal stems: ō'utca, ear (5 ex.), noxuwi'tcatk, they listen (275.18); i'kta, thing (117.11); iamkEmō'ktia, I pay thee (24.9); ō'kumatk, baton (191.12), nau-Xē'matk, I beat time with a baton (27 ex.); nauā'-itk, net (95.23), nixēnauwā'-itkēmama, I will make net (100 ex.); Lqētcamē'tē, comb (13.20), aLEnaxa'ltciam, I comb myself (8 ex.); ō'pXa, alder-bark (66.21), nLalō'pXa, I dye in alder-bark juice (125 ex.); tā'ta, uncle (9.16), amEnā'tata, I am your uncle (23.26).

Some Chinook verbs form the singular and plural from entirely different stems: iō'c, he is there (219.7), ōxoēlā'-itx, they are there (153.10); nage'tcax, she cried (40.3), noxoē'nēm, they cried (139.18); ayō'maqt, he was dead (275.1), nuxō'La-it, they were dead (41.25); atciā'wa^ε, he killed him (228.18), atctotē'na, he killed them (11.6).

Plurals are also formed from the singular by dieresis of the stem, as nixā'latck, he rose (38.9), nuxulā'yutck, they rose (127.14); nax^εō'tam, she went to bathe (13.2), lx^εō'yutam, we go to bathe (174.3); aniā'g'ō'La, I put a long stick on (something) (104 ex.), antik'l'ō'yoLa, I put many sticks on (something) (104 ex.); nau'itck, she danced (123.21), mcXeluwā'yutck, you (pl.) dance (36 ex.).

Where English would require verbs or adjectives, substantives are frequently employed in Chinook. Instead of "he fell sick," the expression is ā'yatcla nixā'lax, his sickness came to be on him (125.3); instead of "he was poor" (*or* unfortunate), Lā'xauyam, his poverty (*or* misfortune) (234.15); instead of "the mother of you two is bad," LEmt-ā'naa itcā'qī'atxal, your (two's) mother, her badness (13.24); instead of "he shot him," iā'ma^ε aqē'lax, the shooting was done to him (71.8).

A singular phenomenon is the personification of purely bodily states or actions which are then represented as acting upon the person who experiences or performs them. What with us is caused, becomes in the Chinook idea the agent. Thus instead of "I am hungry" the formula is ō'lo gEna'xt, hunger, she has acted on me (70 ex.), instead of "she tells lies," igō'LgEli tcaxt, lies have acted on her (167.14).

X. COMPARISON WITH THE VERB IN OTHER AMERICAN LANGUAGES

The character of Chinook phonetics associates this language with those of the northwest coast. It abounds in k-sounds, catches, fortes, and explosive l's.

The verb-stem undergoes few modifications. The absence of a close relationship between verbal and substantival stems, and the extreme shortness of the former compared with the latter, separate it still further from other groups such as Eskimo and Sioux. A very few verbs have substantival stems, while verbs themselves resemble substantives only when used as participles. One of the most striking characteristics of the language is its excessive employment of onomatopoeic elements, especially with an auxiliary. Such are rarely found either in Sioux or Eskimo. Singular and plural are formed from different stems in a remarkably small number of cases. The language is thus very different from most other American languages and stands at the opposite pole from Athapascan which even admits of a different stem for each person. An equal simplicity appears when we turn to the cognate subject of reduplication. Curiously enough this widespread North American characteristic, usually employed to indicate distribution, collectivity, or different kinds of plurality, reaches its maximum development among the Salish, while here, close beside them, it is found only in the names of animals and in onomatopoeic stems, as simple duplication. Dieresis of the stem may be supposed to make up for this lack, but its use is very restricted. Metamorphoses caused by the harmonic law between o and u and the k-sounds are almost the only stem changes still to be noted. Traces of them are found elsewhere, but the phenomenon does not reach anywhere near the same proportions. The tendency to elide velars is also peculiar.

Comparing the use of affixes we find this language again very deficient. Setting aside the pronominal elements, Chinook may be called a suffixing language, and, insofar, similar to the majority of American tongues, but the number of such suffixes is very limited and the relations indicated correspondingly few. Compared with the excessive use of affixes in Kwakiutl, Eskimo, Tsimshian, and others, nine locatives, seven frequentatives and continuatives, three prepositionals, and six adverbials make a very

insignificant showing indeed. Moreover, whole series of affixes, such as the nominal of Kwakiutl and the instrumental of Athapascan, Tsimshian, and Sioux, are wanting. Niceties of location, action, etc., which are and must be indicated in many of these tongues, are not required in Chinook, but an opportunity is afforded for the expression of abstract ideas not permissible in them. The causative suffix has here a very limited range compared with its occurrence in Sioux. Of the various moods expressed by affixes in American languages, Chinook has only the potential. Tenses, as for example in the case of Choctaw, are usually much more numerous.

The strong point in Chinook lies, however, in its pronominal system, which is developed to a point unapproached elsewhere on the continent. The existence of a separate prefix for every person of the three numbers, singular, dual, and plural, including exclusives and inclusives in the first person dual and plural, is of itself far from universal, but here the entirely exceptional presence of a sex gender increases the number still further. At the same time the number of morphologically distinct subjective affixes in the transitive is less than usually occurs. The indefinite subjective finds its counterpart in an indefinite objective in Tlingit and Haida. The following table shows the possible combinations of pronominal prefixes:

			Subj.	1st Obj.	2d Obj.
Transitive with 1 object	-	-	—	—	
Transitive with 2 objects	-	-	—	—	—
Transitive with 1st obj. followed by <i>ki</i>			—	—	
Transitive with 2d obj. followed by <i>ki</i>			—		—
Intransitive	-	-		—	
Half-transitive	-	-		—	—

And when one considers that by using the pronominal prefixes in the various persons in the transitive with two objects alone, about two thousand combinations can be formed, some idea is obtained of the great efficiency of the system. The employment

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Page 201, line 16, for t read t

"	202	"	29	"	266.21	read	226.21
"	203	"	17	"	95.2	"	95.20
"	205	"	31	"	95.2	"	95.20
"	205	"	16	"	107.1	"	107.2
"	205	"	16	"	270.7	"	266.5
"	206	"	21	"	89.2	"	89.21
"	207	"	3	"	204.16	(second reference)	read 204.7
"	207	"	19	"	icayā'mukc	read	Lcayā'mukc
"	208	"	12	"	golē'leXEmk	"	Lgolē'leXEmk
"	208	"	13	"	226.8	read	22.6.8
"	211	"	19	"	76.10	"	176.10
"	213	"	10	"	235.14	"	235.15
"	214	"	5	"	111.10	"	130.8
"	216	"	25	"	nalxe'lqamx	read	naLxe'lqamx
"	217	"	5	"	157.1	read	154.1
"	219	"	9	"	30.6	"	213.11
"	220	"	13	"	206.5	"	216.5
"	222	"	14	"	193.1	"	193.19
"	222	"	26	"	74.18	"	47.18
"	223	"	20	"	na-ige'ltcax	read	na-ige'ltax
"	224	"	8	"	3.131	read	136.13
"	224	"	9	"	186.10	"	186.11
"	224	"	29	"	199.6.5	"	199.6.7
"	225	"	14	"	125.7	"	25.7
"	227	"	13	"	12.12	"	12.13
"	228	"	1	"	98.16	"	98.6
"	228	"	14	"	60.05	"	60.5
"	228	"	16	"	70.24	"	95.14
"	231	"	10	"	262.2	"	26.22
"	233	"	1	"	staqigā'xo	read	staqi giā'xo
"	233	"	18	"	qxul	read	qxul
"	233	"	25	"	45.1	"	42.1

of a second objective prefix, and the use of the half-transitive, seem to be extremely rare on this continent.

Nominal sex gender is another striking peculiarity of Chinook. Traces of it are found elsewhere in North America among the Salish, the Chemakum, the Iroquois, and the somewhat questionable Taënsa. The usual distinction between animate and inanimate is found in demonstratives, adjectives, and, originally at least, in nouns. There is an almost excessive use of the auxiliaries, to go and to do, especially the latter, but, singularly enough, other English auxiliaries such as may, must, can, might, would, which elsewhere in America are expressed by affixes, here appear as adverbs — qā'doxue, must; aia'q, can; qē'xtce, intending, qxā'oxaL, cannot — depending on the verb.

Since the gender of each substantive is always indicated by a pronominal prefix, and since, if this substantive happens to be the subject, object, or second object of the verb, the relation is expressed by a corresponding prefix in the verb itself, the substantives really stand in apposition to the verb. Other substantives are connected to each other or to the verb by means of the general preposition *go*, or by the use of a possessive prefix. This latter method of subordinating substantives is very characteristic of the language. The verb is thus the vital center of a Chinook sentence, about which all else is built and upon which it all depends.